	Application No. Applicant(s)		
Notice of Allowability	09/963,350	JACKSON ET AL.	
	Examiner	Art Unit	
	Chat C. Do	2193	
The MAILING DATE of this communication appearable All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commits (GHTS). This application is:	n this application. If not includ junication will be mailed in due	ed course. THIS
1. This communication is responsive to <u>12/08/2004</u> .	·		
2. X The allowed claim(s) is/are 1-18.			
3. A The drawings filed on 26 September 2001 and 08 Decemb	er 2004 are accepted by th	e Examiner.	
<ul> <li>4. Acknowledgment is made of a claim for foreign priority ur</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority do</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application	on No	ation from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the re	quirements
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			NOTICE OF
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") mus  (a) ☐ including changes required by the Notice of Draftspers  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet, Replacement sheet(s) should be labeled as such in the state of the sheet in the state of the sheet is the sheet of the sheet in the state of the sheet is the sheet in the state of the sheet is the sheet in the sheet i	son's Patent Drawing Revie s Amendment / Comment o .84(c)) should be written on t	or in the Office action of the drawings in the front (not the	e back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			Note the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0	6.	nformal Patent Application (PT Summary (PTO-413), ./Mail Date s Amendment/Comment	O-152)
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material		Statement of Readons for And TODD INGS	<b>ŞA</b> G



## **EXAMINER'S STATEMENT OF REASONS For ALLOWANCE**

- 1. Claims 1-18 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

The prior art of records fails to disclose or render an obviousness of a sigma delta interpolator for use in a fractional N synthesizer having a multi-modulus divider comprising an accumulator and a delay circuit coupled to the accumulator to receive n least significant bits and operative for implementing a delay function defined by equation: 1-(1-Z<sup>-1</sup>)<sup>N</sup> wherein N is greater than or equal to 2 as cited in independent claims 1, 7, and 18.

The closest found prior art is the admitted prior art. The admitted prior art also discloses a sigma delta interpolator for use in a fractional N synthesizer having a multi-modulus divider comprising an accumulator and a delay circuit coupled to the accumulator to receive n least significant bits and operative for implementing a delay function defined by equation:  $1-(1-Z^{-1})^N$ . However, the admitted prior art fails to disclose the order of the delay function circuit N is greater than or equal to 2.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do Examiner Art Unit 2193

April 7, 2005

PRIMARY EXAMINER